

Amendments to the Drawings:

The amended version of drawings replaces all prior versions and listings of drawings in the application.

Drawings attached.

Description of Drawings:

(Replacement) Fig. 1 is a block diagram of a FIR filter considered as prior art.

(Replacement) Fig. 2 is a block diagram of an analog FIR filter.

(New) Fig. 3 is a block diagram of an example analog IIR filter.

(Replacement) Fig. 4a is a block diagram of an example 1-tap analog IIR filter.

(New) Fig. 4b is a block diagram of an example analog IIR filter.

(New) Fig. 5 is a block diagram of an example differential analog IIR filter.

(New) Fig. 6a is a schematic of an example transconductance and transimpedance circuit.

(New) Fig. 6b is a schematic of an example single ended transconductance and transimped

(New) Fig. 7 is a schematic of an example transconductance and transimpedance circuit.

(New) Fig. 8 is a schematic of an example transconductance and transimpedance circuit.

(New) Fig. 9 is a schematic of an example analog filter.

(New) Fig. 10 is a schematic of an example analog filter.

(New) Fig. 11 is a schematic of an example analog filter.

(New) Fig. 12 is a floor plan of an example transmission line delay element layout.

(New) Fig. 13 is a schematic of an example analog equalizer circuit.

(New) Fig. 14 is a schematic of an example backplane system.

Remarks (Amended Drawings)

In view of the following remarks and the foregoing amendments, reconsideration and allowance are respectfully requested.

Drawings 1-3 were objected at the mailing of this office action, as Fig. 1 for failing to comply with “Prior Art” label under 37 CFR 1.121 (d).

37 CFR 1.121 (d)-Figs. 1-14

Figs. 1-14 are acceptable at least because these figures have been amended to contain subject matter described in the specification to reasonably convey to one skilled in the relevant art that the inventor had possession of the claimed invention at the time the application of filed.

In particular, Fig. 1 has been amended to contain “Prior Art” label, and to re-label the components for a clear view. Fig. 2 has been amended to show N delay elements as described in the original claim 2 (*see, e.g.*, wherein the number of transmission line segments are an integer, N, with $N > 1$). Fig. 4a is renumbered from Fig. 3 with relabeled components for a clear view. Hence, Applicant asks that the objection to Figs. 1-3 be withdrawn, and these claims be placed in condition for allowance.

Figs. 3 and 5 have been added to contain “the IIR filter” described in the originally filed specification (*see, e.g.*, first line of Fig. 3 description “The same building blocks used in the FIR filter --- An IIR filter uses feedback in its filter structure.”) and claims 2 (*see, e.g.*, Wherein the number of transconductance elements are an integer, M, with $M > 1$ and Wherein the input and output signals are single ended or differential;). Fig. 4b has been added to show a clear application of Fig. 3. Hence, Applicant asks that these figures be place in condition for acceptance.

Figs. 6-8 are acceptable at least because Fig. 6-8 have been added to have a clear antecedent basis for “the transconductance elements and the transimpedance elements” (*see, e.g.*, paragraph 5 and 6 in Fig.2 detailed description “The transimpedance element, 17, converts... The transconductance element is typically implemented as an amplifier”). Hence, Applicant asks that these figures be place in condition for acceptance.

Figs. 9-11 are acceptable at least because Figs. 9-11 have been added to contain subject

matter described in originally filed specification (*see, e.g.* the last 2 and 3 paragraphs in Fig. 2 description "...coefficient taps can be controlled..... The values of Gm can be fixed, programmable, or adaptively controlled.") to reasonably convey to one skilled in the art that the inventor had possession of the claimed invention at the time the application was filed. Hence, Applicant asks that these figures be place in condition for acceptance.

Fig. 12 is acceptable at least because Fig. 12 has been added to have a clear antecedent basis for the "transmission element" as in the original claim 3 (*see, e.g.* ... transmission line segments are implemented on an integrated circuit device,... as microstrip lines...). Hence, Applicant asks that these figures be place in condition for acceptance.

Fig. 13 is acceptable at least because Fig. 13 has been added to show a circuit of the one-tap IIR filter as shown in the original Fig. 3 using the Fig. 6a. Hence, Applicant asks that these figures be place in condition for acceptance.

Fig. 14 is acceptable at least because Fig. 14 has been added for an application as described in the original specifically (*see, e.g.*, background-technical field of invention "The filter application examples... multi-gigahertz serial backplane communications,.."). Hence, Applicant asks that these figures be place in condition for acceptance.

In addition, Applicant believes that no new search is necessitated by the drawings amendments because the amendments are not necessary to distinguish the claims from prior art. Accordingly, Applicant respectfully requests that the drawing amendments be entered.

Priority to Provisional Application

This application claims the benefit of priority from U.S. Provisional Application entitled "Continuous-Time Multi-Gigahertz Filter Using Transmission Line Delay Elements" Application No. 60/460,679 filed on April 4, 2003.

Conclusion (Amended Drawings)

In view of the amendments and remarks herein, the Applicant believes that Fig. 1-14 drawings are in condition for acceptance and asks that these drawings be accepted. The foregoing comments made with respect to the positions taken by the Examiner are not to be construed as acquiescence with other positions of the Examiner that have not been explicitly

contested. Accordingly, Applicant's arguments for acceptance of a drawing should not be construed as implying that there are not other valid reasons for acceptance of these drawings.